

REMARKS

Claims 1-15 are pending. No amendments to the claims were made.

Rejections under U.S.C. § 102(e)

Claims 1-6 and 8-15 are rejected under U.S.C. § 102(e) as being anticipated by Meade *et al.* (US 6,770,261) (hereafter “Meade”). See the Office Action at page 2.

Claim 1 covers a method for acquiring electromagnetic signals received from at least one part of a body placed in a system ... comprising the following steps:

a) injecting, into said body part, an amount of contrast product capable of being temporarily fixed in or of passing through an observed zone of said body part, said contrast product comprising **at least one element capable of causing a chemical shift of a resonance frequency of water hydrogen protons** (emphasis added);

b) exciting said body part by means of a radio frequency wave pulse sequence in a range of frequencies adjusted according to the magnetic induction B_0 and to the chemical shift for at least some of said radio frequency waves;

c) detecting, coherently with the excitation of step b), electromagnetic signals received from said body part, said signals corresponding substantially to **magnetic resonance signals of the protons of the observed zone having undergone the chemical shift** (emphasis added).

The Examiner asserts that “Meade discloses methods for acquiring electromagnetic signals from the body placed in as system with means ... for detecting electromagnetic signals from a body part by injecting a contrast agent capable of passing through a zone of the body and causing a chemical shift of a RF of water hydrogen protons (Col. 33, line 1- Col. 36, line 55, Col. 40-46).” See the Office Action, page 2.

Applicants respectfully disagree. It is Applicants’ understanding that Meade only discloses the use of magnetic resonance imaging contrast agents to increase proton relaxation and decrease relaxation times, resulting in image enhancement. See Meade at Column 7, line 38 – Column 8, line 41 and Column 2, lines 13-34. This reference does not appear to teach the use of a contrast product which contains at least one element capable of causing a chemical shift of a

resonance frequency of water hydrogen protons. Neither does it appear to teach “detecting electromagnetic signals corresponding substantially to magnetic resonance signals of the protons of the observed zone having undergone the chemical shift.” This reference merely uses the NMR spectroscopy to characterize products and intermediates. See Meade, at Column 40, lines 33-58.

Further, Applicants would like to direct the Examiner's attention to page 6, lines 22-30 of the present application:

The chemical shift provided by the contrast product brings about a shift in the resonance frequency of the hydrogen protons contained in the water in proximity to the injected contrast product. This shift in frequency makes it possible to obtain a selective signal from the protons chemically shifted during a radio frequency-based solicitation taking into account this shift. Such selective signal can advantageously be used as a basis for forming an image.

In other words, the chemical shift as noted above plays an important role in the method recited in claim 1 of the present application, as opposed to Meade which does not use this shift in its image enhancement. Applicant submits that claim 1 is not anticipated by Meade. At least for the same reasons, claims 2-6 and 8-16, depending from claim 1, are also not anticipated by Meade.

The fee in the amount of \$1050 for the Petition for Extension of Time is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 21 November 2007

/Anita L. Meiklejohn/
Anita L. Meiklejohn, Ph.D.
Reg. No. 35,283

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906
21788535.doc